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Remarks/Arguments

The Office Action mailed September 4, 2007 has been reviewed and carefully considered.

Reconsideration of the above-identified application, as herein amended and in view of the following remarks, is respectfully requested. Claims 1-22 remain pending in the application.

Drawing objection

Applicant submits herewith a replacement sheet correction Figure 3 by including identifiers for the respective boxes. The replacement sheet includes both Figure 3 and 4. No new matter has been added.

Specification objection

This rejection has been noted. Applicant would like to direct the Examiner's attention to the preliminary amendment that was filed with the U.S. National stage of this application. This preliminary amendment completed the requested information at page 1 of the specification. The remaining portions of the specification as identified by line and pages numbers and/or paragraph numbers in the publication relating to the present application have been provided above. No new matter has been added by these amendments.

Claim Rejections

Claims 1-22 stand rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter.

In asserting this rejection, the Examiner has stated that "the recitation of a serialized stream of digital audio data is construed as a mathematical algorithm, where analysis is performed on a bit by bit basis using windowing techniques."

35 U.S.C. §101 states "whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefore...."

Applicant submits that the present principles are directed to a method (i.e., a process), and is clearly within the enumerated list of items that constitute statutory subject matter. Further, the recited method is not abstract, but rather is physical and transformative. Perhaps most important, the recited method satisfies the new test established by the Federal Circuit in the recent case of *In re Comiskey* (Federal Circuit, September 20, 2007).

Applicant points out that a "serialized stream of digital audio data" is not an algorithm and is the actual work piece on which the method of the present principles operates. An algorithm (or computer program) is a series of steps that could be used to control a processor or other computing device to cause the same to perform some function. That being said, algorithms have been found to be statutory subject matter and the basis for many issued patents. Notwithstanding the foregoing, the present principles are directed to a "method for <u>extracting</u> digital audio words" from a serialized stream of digital audio data (i.e., the work piece on which the method operates). This concept of "extracting" is a <u>physical</u> operation that is being performed on the serialized stream of digital audio data. The stream itself is also a physical feature of the claim.

Additionally, the recent Federal Circuit case of *In re Comiskey* (Federal Circuit, September 20, 2007) clearly states that claim 1 is not an abstract claim directed to mental steps. *In re Comiskey* sets out a test that provides that a process claim is not abstract, but rather is directed to patentable subject matter if (1) the claim involves another statutory class and (2) the claim has a practical application. Regarding the first part of the test, by reciting a "serialized stream of digital audio data" or "extracting plural digital audio data words from said serialized stream", claim 1 involves another statutory class. For example, the recited stream, and the recited "extracting" from the stream, involve a stream, which is at least a manufacture. Regarding the second part of the test, claim 1 has a clear practical application of "extracting ... words ... based upon the location of each transition" (claim 1). Thus, the recent case of *In re Comiskey* also supports (mandates) Applicant's position that claim 1 is not an abstract claim.

In addition, the "construction" of a transition window, is not only a further physical operation, but also a transformative part of the inventive process being implemented. The transformation or forming of something new from a work piece (e.g., the serialized stream of digital audio data) is clearly statutory subject matter within the definition and meaning of 35 U.S.C. §101. Further transformative aspects of the claim include the actual extracting of data from the stream, transforming the stream into, for example, a series of audio data words. Reconsideration and withdrawal of this rejection is respectfully requested.

Claims 1, 11-14 and 20-21 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,245,667 to Lew. Lew discloses a method and structure for synchronizing multiple, independently generated digital audio signals. Initially, applicant would like to point out that the disclosure of Lew relies on Phase Lock Loops (PLLs) to generate the master sampling clock signal and the master bit clock signal (See Col. 5, lines 12-15).

The present principles are directed to extracting digital audio data words from a serialized stream of digital audio data (without the use of PLLs to establish clock signals) and using transition locations in the serialized stream, relative to a preamble sub-window and at least one data sub-window of a transition window that are constructed by the present principles. Thus, it is clear that the present principles is directed to different problem (i.e., not using PLLs due to their inability to integrate with other design technologies) than Lew (i.e., synchronizing audio stream with each other), and performs the solution to this different problem in a completely different way than the teachings of Lew.

The Examiner's rejection relies on a broad construction of several claim terms. For example, the Examiner construes "transition window" as a frame. The Examiner is entitled to the broadest reasonable construction of claim terms. However, at least this construction (of the term "transition window") is not reasonable, as explained below.

Contrary to the Examiner's assertion, Lew does not disclose or suggest "constructing a transition window from an estimated bit time....having a

preamble sub-window, and at least one data sub-window...". In rejecting this aspect of the claimed principles, the Examiner cites Lew at Col. 1, lines 38-51, and Col 1, lines 51-62. These cited portions of Lew describe the structure of the AES signal format standard used for digitally encoding audio signals and transmitting the same. The present principles also works with such signals, and it is believed therein lies the confusion.

Both Lew and the present principles operate on AES signals. However, as suggested above, Lew uses PLLs to established clock signals in order to synchronize two or more AES audio signals by synchronizing the corresponding parts of such signals (as identified at Col 1, lines 38-62). The present principles, however, takes the AES signal (i.e., the serialized stream of digital audio data) and from it, constructs a completely different transition window from which certain data (digital audio words) can be extracted and further processed. This "construction" is a new format that is for use by the present principles, which does not simply use the existing format of the AES signals (as is done by Lew). In fact, Lew requires the AES format of the multiple signals in order to identify corresponding parts of the signals for purposes of synchronization. This is a very clear departure from the teachings of "constructing a transition window" where the format of the window is different than that of the incoming AES signal from which the transition window is constructed.

The manner in which the present principles performs the construction, and/or extraction is neither disclosed, nor suggested by the teachings of Lew. In fact, the cited portions of Lew that describe the AES format for the audio signals is clearly known. Figures 6 and 7 of applicant's disclose discuss this AES subframe and overall format. Figure 8 discusses the constructed transition window which is a clear departure from the AES format disclosed in Lew and used by the Examiner to reject the claimed principles.

In addition, the concept of using the "transition locations" in the serialized stream to extract data therefrom relative to the constructed transition window having a pre-amble sub window is also neither disclosed, nor suggested by the teachings of Lew. Figure 2 of Lew illustrates and AES/EBU form for digital audio streams. As discussed above, the present

principles are operating on AES streams, so the disclosure of the format of such stream by Lew does not in any way anticipate the "transition locations" as claimed by applicant. In fact, Lew teaches away from the present principles by reciting that the PLLs utilize the bit transitions to establish the clock signals it will use for synchronization. (See Col 5, lines 12-15). The remaining disclosure of Lew does not make any further mention of the bit transitions in the AES stream and/or the use of the same in extracting data from the serialized stream of digital audio that is already in the AES format. This is because Lew does not extract anything from the AES stream.

In view of the foregoing, it is respectfully submitted that Lew neither anticipates, nor renders obvious the teachings of the present principles, and particularly the claimed subject matter in independent claims 1, 11 and 20.

Claims 2-4, 8, 15-18 and 22 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Lew in view of U.S. Patent No. 4,837,831 to Gillick et al.

Claims 5-7 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Lew in view of U.S. Patent No. 4,837,831 to Gillick et al. and in further view of U.S. Patent No. 5,490,130 to Akagiri.

Claims 9-10 and 19 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Lew in view of U.S. Patent No. 4,837,831 to Gillick et al. and in further view of U.S. Patent No. 7,180,892 to Tackin.

Claims 2-10 depend from claim 1, claims 12-19 depend from claim 11 and claims 21-22 depends from claim 20. In view of these dependencies and the above-identified distinctions between Lew and the independent claims 1, 11 and 20, it is believed these claims are allowable for at least the reasons cited above with respect to the independent claims.

In view of the foregoing, Applicant respectfully requests that the rejections of the claims set forth in the Office Action of September 4, 2007 be withdrawn, that pending claims 1-22 be allowed, and that the case proceed to early issuance of Letters Patent in due course.

It is believed that no additional fees or charges are currently due. However, in the event that any additional fees or charges are required at this

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time in connection with the application, they may be charged to applicant's representatives Deposit Account No. 07-0832.

Respectfully submitted,

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